SUBJECT	REFERENCE
Decontamination and Disposal of Gas Pipe and System Components Removed from the Gas System	**EP No. 23 – Natural Gas Piping and System Component Management**

1.0 PURPOSE

To document the procedure to decontaminate gas pipe and system components removed from the distribution and transmission systems, pursuant to the EPA-issued "Approval to Decontaminate Polychlorinated Biphenyls (PCBs)" (the Approval) for our company's alternative decontamination procedure and 40 CFR 761.

2.0 SCOPE

This guidance document applies to the decontamination and disposal of all gas pipe and system components, other than gas meters or mercury-containing gas regulators that are removed from the distribution and transmission systems. Attachment 1 to this document contains the pipe soaking procedures and requirements.

3.0 RESPONSIBILITIES

a. It is the responsibility of the "authorized field supervisor" (as defined in the Approval) or environmental contractor to safely transport, properly decontaminate all metal gas pipe and system components, and scrap for salvage cleaned metal items. It is also their responsibility to dispose of all non-metallic gas pipe and system components in the appropriate manner as designated by Environmental Management. It is also the environmental contractor's responsibility to provide the appropriate weight tickets and metals recovery checks received for each load of cleaned metal scrap, and to provide soaking reports (see Section 11 Record Keeping of EG-2302 Appendix 1) required by the Approval.

b. Pipe storage containers shall be switched out or emptied at least every 28 days. If, and only if, the storage containers meets certain EPA-approved standards, this timeframe can be extended to one year from the accumulation start date. (See EG-2301 for more information.)

c. It is the responsibility of Environmental Management to maintain the appropriate approvals for alternate decontamination of gas pipe and system components with EPA, direct the soaking process with the environmental contractor, and retain documentation related to the process as required by the Approval.

4.0 DECONTAMINATION OF REMOVED GAS PIPE AND SYSTEM COMPONENTS

4.1 Pipe Soaking Process

a. All used gas pipe shall be transported via pipe storage containers from the various service yards, field locations and/or contractor yards to the soaking areas in Greenpoint, NY or Everett, MA.

b. All gas pipe brought to Greenpoint and Everett shall be soaked in accordance with Attachment 1 of this document. All soaking will be conducted on National Grid property while under the supervision of OSHA 40 Hour Trained personnel.

c. After soaking a sample of the solution shall be taken and sent to the lab for analysis. The pipe and components may then be transferred from the soaking container to a container designated for scrap metal and may be released for transport to a metals recycler for scrap value reimbursement. Weight tickets shall be provided to Investment Recovery for proper reconciliation of reimbursement funds. (Reimbursement checks are sent directly to Investment Recovery by metals recyclers.)

d. Metallic pipe wrapped with coal tar coating is disposed of as a PCB article.

e. Any wastes generated by the soaking process (filter media, sludges, rags, materials from the bottom of the soaking container, etc.) shall be disposed of as required by regulations.

f. All PCB Containers, including storage containers containing pipe and containers and tanks containing soaking solution, must be marked with the PCB M_L label.

4.2 Spill Preparedness

a. National Grid shall maintain SPCC Plans for the soaking sites, as required by SPCC regulations.

b. The environmental contractor shall provide the necessary spill response equipment, and have it stored and ready to use on site.

c. If a release occurs, the environmental contractor shall respond in a manner that can be done safely, and notify the Environmental Management immediately.

d. Releases exceeding the reportable quantity for PCBs must be reported to EPA by phone within two (2) hours. An initial written report must be submitted to EPA by the end of the next business day, and a full clean-up report must be submitted within 5 business days.

4.3 Facility Security

a. Public access shall be restricted to the area where the soaking process takes place and associated materials are stored.

4.4 Closure Plan, Closure Cost Estimate and Financial Assurance

a. National Grid must maintain Closure Plans, Closure Cost Estimates and Financial Assurance Requirements for closure of any of its pipe soaking sites.
b. The USEPA must be notified annually for Financial Assurance and Closure Estimates and they must be updated within 60 days of the anniversary of the establishment of the financial instruments.

5.0 Attachments

5.1 Attachment 1 - Operating Procedure: Decontamination of Natural Gas Pipe and System Components

Record of Change		
Date of Review/Revision:		
Revision	**Date**	**Description**
0	10/15/10	New procedure.
1	1/24/2017	[Update for concurrence with new USEPA Pipe Soaking Permit]

SUBJECT	REFERENCE
Operating Procedure: Decontamination of Natural Gas Pipe and System Components	**EG 2302**

1.0 Description

Metallic gas pipe, when it is removed from the system, must be decontaminated to remove any potential PCB residuals prior to it being disposed of or recycled as scrap. Instead of having to conduct testing on each section of pipe removed, National Grid has elected to assume that gas pipe is contaminated and we have opted to decontaminate metallic gas pipe that is removed from the ground. National Grid has an approved procedure from the US Environmental Protection Agency (USEPA) that allows National Grid to decontaminate metallic gas pipe via an alternate method under 40CFR 761.79(h) to remove PCB from the pipe. Used plastic gas pipe is currently disposed of as PCB Contaminated debris.

This document is an Appendix to EG-2302 "Decontamination and Disposal of Gas Pipe and System Components Removed from the Gas Distribution System".

2.0 Scope

This standard operating procedure (SOP) documents the minimum requirement for the decontamination of metallic natural gas pipe and system components (gas pipe) removed from the National Grid distribution and transmission systems, pursuant to the EPA-issued "Approval to Decontaminate Polychlorinated Biphenyls (PCBs)" for National Grid's alternative decontamination procedure and 40 CFR 761. This guidance document applies to the decontamination and disposal of gas pipe and system components, other than gas meters or mercury-containing gas regulators that are removed from the distribution and transmission systems. This procedure is applicable to National Grid workers and/or contractors hired to perform this service for National Grid.

3.0 Definition and Terms

Coal Tar Wrap (CTW) – an asphaltic wrap applied to the outside of metallic pipe to prevent corrosion. CTW may contain either or both low levels of PCB and asbestos fibers. Pipe coated with CTW must be handled separately. CTW can either be removed from the pipe prior to soaking and disposed of properly or the pipe can be soaked then managed and disposed of separately. Pipe containing CTW cannot be treated as scrap metal.

Gas Pipe – refers to metallic natural gas pipe and system components removed from service that is assumed to contain non-liquid PCB contamination. Plastic gas pipe is handled separately.

Pipe Soaking – The process of decontaminating gas pipe using a soaking solution in a soaking container.

Soaking Solution - a 10% terpene hydrocarbon / water solution that has proven to be effective in removing PCB from interior pipe surfaces. Only Enviro Clean can be used without prior approval of National Grid.

Soaking Container – a dedicated watertight container used to decontaminate gas pipe.

Soaking Report – documentation of each soaking event as described in Section 11.

4.0 Worker Qualifications

Workers performing pipe soaking shall have an OSHA 40 Hour Hazardous Waste Operations certificate in accordance with 29 CFR 1910.120. In addition the worker shall have PCB awareness and training specific to the requirements of this procedure.

5.0 Pipe Soaking Procedure

Pipe soaking operations may only be carried out at a secure National Grid facility in a dedicated area capable of storing gas pipe containers, pipe soaking containers, storage of equipment and supplies and storage of soaking solution. Pipe soaking operations cannot be performed in areas where other utility operations typically take place such as truck loading and unloading, equipment storage or parking.

5.1. Preparing for pipe soaking

5.1.1 Prior to pipe soaking operations commencing, ensure that the soaking solution is available and has previously undergone lab analysis proving that the solution is below 2 ppm from previous soaking cycle or that the solution is new.

5.1.2 Ensure there is sufficient solution to completely cover the pipe that is to undergo soaking.

5.1.3 Have scrap metal and Coal Tar Wrapped (CTW) pipe roll off containers available as needed for pipe once it has been soaked and separated.

5.1.4 Ensure sufficient supply of containers (cubic yard boxes, 55 gallon steel drums) and labels (PCB and Hazardous Waste) are available to place PCB contaminated waste, (incidental plastic gas pipe, CTW, PPE, debris found in soaking container, et.), into after soaking.

5.1.5 Have available on site adequate equipment and supplies such as: boom truck, back hoe, support vehicle(s), vacuum truck, tools, spill materials etc., that are needed to transfer various sized gas pipe from storage container to soaking container as well as from soaking container to scrap roll off and to transfer soaking solution from storage to soaking containers.

5.2 Have sampling equipment and Chain of Custody forms available in order to collect samples of soaking solution and have sent to accredited laboratory for analysis.

5.3 When pipe is delivered to site, document the following information on attached Hopper Tracking form, or equivalent, and record information on pipe tracking spreadsheet

5.3.1 Date pipe arrived to site

5.3.2 Location pipe came from

5.3.3 Approximate weight of pipe

5.3.4 Location on site where pipe is being stored

5.3.5 Container number, if so marked

6.0 Loading the soaking container

6.1 Stage transfer container to facilitate loading into soaking container.

6.2 Relocate pipe via roll off, boom truck, crane, slings, claw, magnet, etc., from storage container to soaking container.

6.2.1 This may be accomplished by dumping pipe from one container to another or by mechanical means.

6.3 Ensure that all pipe has been placed in soaking container.

6.4 If necessary, move small pieces of pipe, by hand, from the storage container into the soaking container. Proper safety procedures must be followed including PPE, entering

and exiting procedures, handling procedures including lifting and transferring between the containers.

6.5 Note: This process is not approved to clean PCBs from plastic pipe, therefore plastic gas pipe is to be removed and disposed of as PCB Contaminated debris. Any incidental pieces of plastic (i.e. connected to metallic pipe or fittings) that go through the soaking process must be removed afterwards and disposed of as PCB contaminated debris.

7.0 Adding the solution

7.1 Once all crew members are clear of the soaking hopper place soaking solution into soaking container until all pipe sections are completely covered with solution.

7.2 The temperature of the soaking solution must be between 39 and 97 degrees Fahrenheit.

7.3 Document the time, soaking solution temperature and ambient temperature when the solution was placed in the soaking container.

7.4 During soaking visually inspect for leaks.

8.0 Soak time

8.1 Pipe should be soaked for 2 – 4 hours.

8.2 Document the end time.

9.0 Sampling Requirements

9.1 After each soaking event a sample of the solution must be collected for laboratory analysis.

9.2 Samples shall be collected using a disposable plastic thief or other suitable device to collect a representative sample of the liquid column and placed in an adequately sized glass sample bottle.

9.3 A representative composite sample should be collected by the follow method.

9.3.1 Collect a sample from a random point in the soaking box.

9.3.2 Release some liquid from the thief then release some liquid into the sample jar.

9.3.3 Repeat in various locations placing liquid in the jar using various amounts from various strata until the sample bottle is full

9.4 Complete laboratory provided Chain of Custody

9.5 Package and ship sample in accordance with contract laboratory instructions.

10.0 Removing solution

10.1 After allotted soaking time, sample solution and send for analysis for PCB at approved laboratory.

10.2 Pump solution out of soaking container into vacuum truck or holding tank.

10.3 Record percent solution recovered.

11.0 Removing pipe

11.1 Allow pipe to air dry for a sufficient amount of time such that there is minimal visual liquid remaining on the pipe.

11.2 By mechanical means; boom truck, crane, slings, claw, magnet, etc.; pick pipe from soaking container and relocate to scrap metal container and/or CTW pipe container.

11.2.1 CTW pipe is not scrapped but disposed of at appropriate disposal facility.

11.2.2 Ensure all plastic pipe has been placed in appropriate disposal containers and labeled as PCB and Hazardous Waste.

11.3 Once all large pipe has been relocated to scrap metal container, it may be necessary for workers to enter the container in order to remove smaller pieces, debris, etc. Follow all safety procedures noted in section 6.4 and the Safety and Health Plans.

11.4 Clean out all remaining debris and place in appropriate disposal container and label as PCB and Hazardous Waste.

12.0 Laboratory Analysis

12.1 If soaking solution lab results indicate acceptable levels of PCB, less than 2 ppm, the solution may be reused during the next soaking cycle.

12.2 If lab results indicate PCB levels above 2 ppm, dispose of soaking or filter solution in accordance with appropriate regulations.

12.3 Soaking solution may be disposed of if solution has become dirty or odoriferous.

13.0 Scrap pipe

13.1 Arrange to have the scrap metal hopper brought to recycling facility and have replacement hopper dropped at site for next soaking cycle.

14.0 Spill Preparedness

14.1 National Grid shall maintain SPCC Plans for the soaking sites, as required by SPCC regulations.

14.2 The environmental contractor shall provide the necessary spill response equipment, and have it stored and ready to use on site.

14.3 If a release occurs, the environmental contractor shall respond in a manner that can be done safely, and notify the Environmental Management immediately.

14.4 Releases exceeding the reportable quantity for PCBs must be reported to EPA by phone within two (2) hours. An initial written report must be submitted to EPA by the end of the next business day, and a full clean-up report must be submitted within 5 business days.

15.0 Facility Security

15.1 Public access shall be restricted from the area where the soaking process takes place and associated materials are stored.

16.0 Recordkeeping

16.1 Soaking Report: For each batch of pipe and system components processed, the following records must be included in a report kept for each soaking cycle:

16.1.1 Name, address and telephone of the operator and supervisor conducting the soaking operation.

16.1.2 Name and business address of the company whose metallic pipe and components are being processed. In this case, National Grid.

16.1.3 Site from which gas pipe was collected and out of service date of pipe. This should be the date that is on the container labeled as Accumulation Start date.

16.1.4 Description of the metallic pipe and components

16.1.5 Lab analysis indicating estimated quantity and PCB concentration of the cleaning solution after the soaking has been completed.

16.1.6 Amount of soaking solution used and recovered, in gallons and the percent solution recovered.

16.1.7 Approximate temperature of soaking solution.

16.1.8 Date, time and duration of the processing.

16.1.9 Estimated concentration of solution of PCB prior to using. This should be the previous lab analysis.

16.2 The Soaking Report must be compiled within 60 days of the processing of each batch and kept at a centralized location on site, and made available to EPA for inspection.

16.3 A copy of the Approval and a copy of the SPCC Plan must be maintained on site.

16.4 Copies of waste records of PCB or assumed PCB wastes shall kept on site.

16.4.1 Waste manifests noting the estimated quantity and PCB concentration of wastes produced, method of disposal, and location of the disposal facility for each waste.

16.4.2 The certificate of destruction from the TSCA-permitted facility used for disposal of any wastes generated by the process.

16.5 Soaking records shall be maintained on site for five (5) years. All records must be maintained at a secure location for ten (10) years after the decontamination date of the last job.

17.0 Health and Safety Plan

17.1 For all work conducted by National Grid employees the National Grid Corporate Health and Safety Plan shall be followed. When Contracted workers are being utilized, a

site specific Health and Safety Plan shall be submitted for review during each contract cycle.

17.2 In addition to the requirements of the National Grid Corporate Safety Plan, the following must be included in the Contractors Site Specific Health and Safety Plan:

17.2.1 Site-Specific Safety Plan: Before decontaminating any natural gas pipeline, the contractor shall develop and maintain at the facility a site-specific safety plan for the activities covered by this approval. The Contractor shall also provide a copy of the site-specific safety plan to the emergency coordinator of the facility where it will operate prior to the Contractor arriving at the facility. At a minimum, The Contractor shall include the following site-specific information in each site-specific safety plan:

17.2.1.1 Scope of work (description of the decontamination methods used, amount of PCB contaminated natural gas pipeline and surface concentrations that might be found at any given time or in directly associated storage containers, and any hazardous materials to be used);

17.2.1.2 Project personnel, including roles, responsibilities and qualifications, name of on-site safety coordinator, and name(s) of any on-site cardiopulmonary resuscitation (CPR)/First-Aid certified person(s);

17.2.1.3 Emergency contact information, including local authorities (e.g., local fire and police departments) and nearest medical facility that would accept patients contaminated with chemicals;

17.2.1.4 Hazard identification and control/mitigation measures;

17.2.1.5 Names of all chemicals used at the facility by the Contractor along with approximate quantities and the corresponding safety data sheets (SDS);

17.3 Emergency action plan(s) specifying the following:

17.3.1 Contact information – project and property management, and the persons responsible for handling emergencies (with 24-hour a day contact in the event of an emergency), including both phone numbers and email addresses

17.3.2 Evacuation plan(s)

17.3.3 First aid location(s)

17.3.4 Eye-wash station location(s)

17.3.5 Fire extinguisher location(s)

17.3.6 Location of SDS

17.3.7 The Contractor shall not be permitted to operate indoors, as this could present an increased risk for fire hazards if chemicals are present, and an unsafe environment due to the contained nature of buildings.

17.3.8 The Contractor shall have a fire extinguisher at the location of the operations. The Contractor shall maintain and clearly label fire extinguishers and other firefighting equipment that are capable of suppressing a fire associated with terpene hydrocarbons (Enviro Clean) and other types of fires that may be associated with materials treated by The Contractor's decontamination methods. Fire extinguishers shall have the following:

17.3.8.1 Annual inspection tag,

17.3.8.2 A gauge indicating fully charged,

17.3.8.3 Pin with security seal, and

17.3.8.4 Instructions on how to use.

National Grid Pipe Soak Tracking Form		
Hopper Information		Initial
Date Arrived on site:		
Hopper Number (if present)		
OOS Date (Accum. Start Date)		
Amount of pipe		
Description of where stored on site		
Soak Date		
Soak Time Start		
Soak Time End		
Length of Soak		
Ambient Temp		
Solution Temp		
% Volume recovered soaking solution		
Sample Collected		
Number of waste drums generated		
Scrap Metal Hopper Number		
Lab Analysis Number		
Lab Analysis results		

SUBJECT	REFERENCE
Operating Procedure: Decontamination of Natural Gas Pipe and System Components	**EG 2302**

Record of Change		
Date of Review/Revision:		
Revision	**Date**	**Description**
0	3/2/17	New procedure.